



06-04-20;10:00AM;FURUYA&amp;CO

在(親山)

:36390419

# 15/ 17

## IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: KUBO et al.

For: Surfactant Composition Confirmation No. 5762

Serial No.: 10/829 167

Group: 1751

Filed: April 22, 2004

Examiner: Mruk

Attorney docket

No.: 0425-1128PUS1

The Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

## DECLARATION UNDER 37 CFR 1.132

I, Makoto KUBO, hereby declare as follows:

I am one of the co-inventors of the invention as described and claimed in the above identified patent application.

I have carried out additional tests procedures and results are below described.

## &lt;Synthesis experiment of compared compound&gt;

A 1L reactor equipped with a thermometer, a stirrer, a nitrogen-blowing tube was charged with 130 g (1 mole) of 2-ethyl-1-hexanal and 0.5 cc of boron trifluoride diethyl ether complex and then the mixture was heated to 70°C. Then, 122 g (0.22 mole) of 1,2-epoxyhexadecane was added dropwise to the mixture over 30 minutes, maintained at 70 to 80°C. The reaction was terminated just after having confirmed that the amount of 1,2-epoxyhexadecane, left unreacted, was less than 1% with gas

BEST AVAILABLE COPY

Serial No. 10/829 167 - page 2

chromatography and then the product mixture was cooled.

Then water was added and the catalyst was separated out by phase separation. An excess alcohol was separated out by distillation at about 180°C at 0.007 kpa to obtain the intended product.

<Evaluation of compound>

The obtained product was tested in the same manner as shown in the instant patent application in view of viscosity and foaming.

Results are:

\* Viscosity test

Viscosity : 250 mpa.s

\*Foaming test

A tested composition was prepared from:

The obtained compound 0.75%

LAPB 3.75%

AES 10.5 %

Purified water Balance.

Amount of foam(mm): 215

<comment>

When compared with the present invention product in the results of viscosity test and foaming test, the present invention compound has an unexpectedly excellent improvement in thickening and foaming for an anionic surfactant. It is noted that the products of the present invention 1 to 6 of Table 6 of the instant patent application are superior to the above shown control composition in view of foaming.

TEST AVAILABLE COPY

Serial No. 10/829 167 - page 3

I hereby declare that all statements made herein of any own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: April 25, 2006

Makoto KUBO

Makoto KUBO

BEST AVAILABLE COPY